

WHAT IS CLAIMED IS:

1. A method for assessing the risk of developing insulin dependent diabetes mellitus in an asymptomatic human patient, said method comprising:

detecting the presence of autoantibodies to a 38 kD autoantigen in a serum sample from the patient, wherein the 38 kD autoantigen is an amphiphilic membrane-bound islet cell protein having a pI in the range from 5.6 to 6.1.

2. A method as in claim 1, wherein the autoantibodies are detected by immunoprecipitation with labeled autoantigen.

3. A method as in claim 1, wherein the autoantibodies are detected by reaction with autoantigen immobilized on a solid phase, separation of the solid phase from the serum sample, and detection of autoantibodies bound to the solid phase.

4. A method for assessing the risk of developing insulin dependent diabetes mellitus in an asymptomatic human patient, said method comprising:

detecting the presence of autoantibodies to a 38 kD autoantigen in a serum sample from the patient, wherein said 38 kD autoantigen is an amphiphilic membrane-bound islet cell protein having a pI in the range from 5.6 to 6.1 and said 65 kD autoantigen is glutamic acid decarboxylase and wherein presence of either or both of the autoantibodies indicates a likelihood of developing insulin dependent diabetes mellitus.

5. A method as in claim 4, wherein autoantibodies to the 38 kD autoantigen are detected by immunoprecipitation with labeled 38 kD autoantigen.

6. A method as in claim 5, wherein autoantibodies to the 65 kD GAD are detected by immunoprecipitation with labeled 65 kD GAD.

7. A method as in claim 4, wherein autoantibodies to the 38 kD autoantigen are detected by reaction with the 38 kD autoantigen immobilized on a solid phase, separation of the solid phase from the serum sample, and detection of autoantibodies bound to the solid phase.

8. A method as in claim 7, wherein the autoantibodies to the 65 kD GAD are detected by reaction with the 65 kD GAD immobilized on a solid phase, separation of the solid phase from the serum sample, and detection of autoantibodies bound to the solid phase.

9. A method for assessing the risk of developing insulin dependent diabetes mellitus in an asymptomatic human patient, said method comprising:  
obtaining a serum sample from the patient;  
exposing the serum sample to a first ligand which binds specifically to autoantibodies to a 38 kD membrane-bound islet cell protein having a pI in the range from 5.6 to 6.1;  
and  
detecting binding between the substance and the autoantibodies.

10. A method as in claim 9, further comprising:  
exposing the serum sample to a second ligand which binds specifically to autoantibodies to a 64 kD islet cell autoantigen (GAD<sub>65</sub>).

11. A method as in claim 10, wherein the first ligand which binds to the autoantibodies to the 38 kD protein comprises the 38 kD protein.

12. A method as in claim 11, wherein the second ligand which binds to the autoantibodies to the 64 kD comprises GAD<sub>65</sub>.

